

PROPOSAL FOR TASMANIAN PRE SCHOOL CENTRE FOR CHILDREN WITH AUTISM – ABA-BASED TREATMENT

Introduction.

The Rudd Government's decision to establish ABA-based Pre-School Centres for children with Autism presents an exciting opportunity for Australia to be in the forefront in providing evidence-based, effective treatment for this difficult condition. If properly implemented, evidence indicates that nearly 50% of children who participate for two years in such a program will need no further special services for the rest of their lives. Others will have a greatly reduced need for services. In addition to the major improvement in the quality of life for these children, such outcomes represent major savings in the cost of provision of future services.

All this, however, can only be achieved if the Centres are of a standard that matches or exceeds that of existing centres which are recognised as running programs which are world's best practice.

In preparing this proposal, the authors have drawn on their knowledge of the two Centres which may be considered the benchmarks in this field, the Princeton Child Development Centre and the Alpine Learning Centre, both located in New Jersey, USA. Both these centres deliver intensive early intervention using Applied Behaviour Analysis/ Discrete Trial Training (ABA/DTT).

Centre Staffing.

ABA/DTT Intensive Early Intervention requires that children receive 1:1 therapy for between 30 and 40 hours per week, therefore centres must have a direct-service staff:client ratio of 1:1. Anything less fails to meet world's best practice standards, and leads to a diminution of the program. In addition to these staff, an adequate level of support staff must be added. Most importantly, the Program Director must have experience in, as well as a high level of theoretical knowledge of, the delivery of ABA/DTT programs for children with Autism. (Such persons are rare in Australia).

The staffing requirements are listed below and duty statements for all staff are provided in this proposal. It is also suggested that consultants experienced in the delivery of ABA programs be engaged to assist with the selection process, as it is only from within these ranks that sufficient knowledge and expertise will be found to ensure appropriate decision making.

Because the numbers of persons with the necessary qualifications and/or experience within Australia (let alone Tasmania) it is recommended that all positions be advertised Australia-wide and in New Zealand.

Staffing requiredProgram Director/ Psychologist

- essential has experience in delivery of ABA Intervention for Autism.
- eligible for registration as a psychologist

Nurse/ Therapy Assistant

- qualified registered nurse, willing to also undertake Therapy duties

2 x Case Managers (Lead Therapists)

- essential have extensive experience in delivery of ABA Interventions
- preferably degree in an appropriate area; eg speech pathology, psychology

4 x Senior Therapists

no formal qualifications necessary, but highly skilled in ABA delivery.

16 x Therapists

no qualifications necessary, will train.

Administrator/Coordinator

- Prefer experience in human services sector
- Accounting/bookkeeping experience
- Good PR skills

Cleaners

Consultant Speech Therapist, Physiotherapist and Occupational Therapist “on Call”.

Costs:

Program Director \$100,000 pa = \$135,000

Nurse/Therapy Assistant \$45,000 pa = \$60,750

Case Managers \$55,000 pa = \$148,500

Senior Therapists \$40,000 pa = \$216,000

Therapists \$30,000 pa = \$648,000

Administrator \$45,000 pa = \$60,750

Allowance for Consultants \$50,000

Allowance for cleaners \$40,000

Total Salaries (+allowance) \$1,358,750

Centre Operations

It is proposed that the Centre would open 8.30 am – 5.30 pm Monday to Friday. In addition, the Centre would be used in the evenings and/or week-ends to provide Parent Training sessions. (Note that research indicates that parent training in treatment delivery greatly enhances the efficiency, and possibly the effectiveness of the Centre program.) To allow for these out-of-hours activities and consequent staff –time off-in-lieu, and for in-service staff training and any other contingencies, children would attend the centre four days per week.

The structured program would be implemented between 8.30 am and 5.00 pm, the last half hour to allow for departure of the children. In order to ensure maximum engagement of children throughout the day, a two-shift lunch break would be implemented, so that during that time children are still engaged on a 1:2 staff ratio.

Pre – Operational/Beginning Phase – Staff Training

As it is extremely unlikely that more than a small minority of staff with the necessary experience in ABA/DTT could be recruited, it is recommended that experienced consultants be employed to undertake staff training. The nature and duration of training will vary according to the positions being trained. The following is suggested:

All personnel:

1. 1 x 1-day introductory workshop covering nature of autism, theory of ABA and DTT, Basic practical implementation.
2. 1 x 1-day orientation to aims, goals of centre, ethics, policies and procedures.

Therapists: 2 x 1-day workshops on theory and practice of ABA/DTT

(inc. Nurse /TA) 6-10 x 2 hour on-the-job training sessions

Case Managers : 2 week intensive training course – see attachment A

Program Director/ Psychologist. Training required will depend on extent and nature of past experience, but will possibly require both short and long term inputs in various areas.

It would also be difficult to train the full quota of staff at the one time, therefore it is suggested that the Centre commence operations with half numbers, with the remainder of clients and staff recruited four months after opening.

Governance of the Centre

It is strongly recommended that the Governance of the Centre should be vested in an expert panel, and that the Program Director be responsible to this panel, rather than to a departmental officer. Such a panel, perhaps constituted as an advisory board to the responsible minister, should eventually act for all Centres Australia wide. A list of potential members is provided in Appendix A.

Premises requirements.

A building, or part thereof, comprising the following is required:

Reception area 20 sq.mtrs.

Administrator's office 10 sq.mtrs.

Administration (staff) office 12 sq.mtrs.

Amenities room (kitchen/dining) 40 sq.mtrs.

Storage room 10 sq.mtrs

Program Director's office 10 sq.mtrs.

Assessment room 15 sq. mtrs.

Nursing station/office 12 sq.mtrs

Staff office (to be divided into work stations) 50 sq.mtrs

Staff toilets (25 persons, predominately female) 12 sq.mtrs

Children's toilets (20 persons, majority male) 12 sq.mtrs.

Visitors toilet 2sq.mtrs.

Quiet rooms x 3 = 30 sq.mtrs.

Several Therapy Rooms capable of partitioning into 2 – 4 therapy stations for a total of 20 stations = approx 100 sq.mtrs.

Approx. total indoor area 335 sq.mtrs

It is essential that a secure outdoor area of at least 100 sq. mtrs. be available.

Equipment

Offices:

Desks and office chairs 23

Filing cabinets 10

Cupboards 3

Visitors chairs 8

Computer stations 23

ABA Software and licences

Printers 4

Examination couch 1

Photocopiers (high volume models) 3

Fax 1

Telephones – 10

Therapy areas:

Children's tables 23

Children's chairs 46

Storage units 23

Cupboards 4

Variety of Therapy Materials

Amenities room

Cupboards

HWS

Tables and chairs to seat 12

Outdoors

Children's play equipment – climbing bars, see-saw, slide, swing, trampoline

Bench seats 2

Proposed Timetable for establishment:

Months 1 to 3

Advertise and recruit staff.

Acquire and equip premises

Establish governing body

.Advertise for clients

Month 4

Train staff (off the job training) and Induction.

Month 5

Induct 5 clients

Conclude staff training (on the job)

Month 6

Induct 5 clients

Month 7

Advertise and recruit final 10 staff

Off-the-job training and induction for new staff

Month 9

Induct clients to fill remaining vacancies

On the job training for new staff.

Program Content

An ABA/DTT program addresses all areas of the child's functioning, with equal emphasis on both enhancing strengths and remediating weaknesses. Needs are identified by detailed psychological assessment, and are developed into an Individual Program Plan by a Case Manager.

The areas of functioning which may be addressed are:

Ability to attend and cope with sensory information

- visual
- auditory
- tactual
- kinaesthetic/proprioceptive

Children with autism frequently have deficits in their ability to attend in different modalities. Without appropriate attention, the child cannot learn: thus this area would normally be the first priority in the child's program.

Social Behaviour/ Play Skills

One of the classic features of autism is the inability to initiate, or maintain appropriate contact/relationships with others. Without an interest in other people, and a desire to interact with them, little social learning can take place. Remediation of difficulties here will include teaching attention to person, appropriate forms of interaction and teaching the child to play constructively and cooperatively with others.

Language Development

- Receptive (understanding what is said)
- Expressive (using a language code – eg. Pictographs, speech)
- Articulation (speech, pronunciation and voice)
- Communication (“talking” to people)

In almost every child with autism, and in most cases of developmental delay, there will be difficulties with most of the above aspects of language development. Each will be individually addressed in the program

Cognitive/Conceptual Skills

Cognitive/Conceptual Skills are the “thinking” skills. They include memory, the ability to represent (recognise pictures) and imagine, recognise relationships between objects / persons / events, the ability to solve problems and think in an abstract way. Children with autism and/or developmental delay have difficulties in this area.

Visuo-Spatial Skills

In children with autism, visuo-spatial skills, ie the ability to discern shapes, make judgements about size, and relationships between objects, is often a relative strength. Exercises to further develop and strengthen these skills will be included in the Centre program. (note that these skills are important as a basis for the development of mathematical concepts.)

Fine Motor Skills

Difficulties with muscular control of fine movements, such as are required for drawing and writing (Dyspraxia) are often a feature of autism and developmental delay. Where such difficulties are identified, remedial exercises will be included in the Centre program

Gross Motor Skills

Poor control of musculature needed for actions such as running, jumping skipping, throwing, etc. is sometimes encountered in children with autism or developmental

delay. Again, exercises will be included in the child's program where a need has been identified. Gross Motor skills are needed for integration into playground activities.

The actual content of each child's program will depend on the priorities, decided in consultation between parents and Case Managers, of the needs identified by the initial assessment.

Parent Training

In addition to 1:1 therapy for the child, research indicates that teaching parents the theory of ABA and implementation strategies is an essential adjunct. This is to ensure active parent participation which greatly assists generalisation of skills taught in the centre. It is proposed that regular "parent workshops" will be an integral part of the program.

APPENDIX A

Some potential candidates for inclusion on a governing board (in alphabetical order).

Dr. Tony Atwood: Psychologist Private Practice Qld

Dr. Jay Birnbrauer: Formerly Assoc. Professor Psychology at Murdoch University and Director of the Young Autism Project WA

Mr. John Brigg WA Ed. Dept. –head of special autism units

Mr. Daryl Cooper: Executive Coordinator, ISADD (Intervention Services for Autism and Developmental Delay) WA

Dr. Jenny Couper: Paediatrician, South Australia

Ms. Mary Gebert: Vic

Mr. Roger Law: Parent and Activist ATAC Tas

Dr. Margot Prior: Formerly Professor of Psychology, Melbourne University Vic

Ms J. Tender: Director and Principal Psychologist, ISADD WA

DUTY STATEMENT –Program Director/Psychologist**Responsible to:****Duties:****Program Management**

Responsible for overall functioning of the Centre, and the therapy program, ensuring that programs are individualised to each child, are updated in a timely manner according to the progress of each child, and implemented with accuracy and precision by all staff.

Liaises with other agencies and represents the Centre to the community.

20%

Assessment.

Undertakes psychological assessments for the purpose identifying client's needs and/or reviewing progress, and making program suggestions. Prepares written reports.

20%

Program Management

Conducts behavioural observations of clients in order to provide intervention strategies.

Advises staff on appropriate behaviour management strategies for individual clients.

Supports and trains staff in delivery of programs.

25%

Parent Counselling.

Counsels parents as required

15%

Research.

Conducts such research as directed. 10%

Other.

Undertakes other duties as required

DUTY STATEMENT - ADMINISTRATOR

1. Maintains the Centre's accounts, and performs all bookkeeping/accounting functions, including payroll, debtors and creditors, accounts receivable and payable, trial balances and reconciliations.
2. Ensures that all services are correctly accounted and billed.
3. Ensures that all payments, including salaries, tax instalments, superannuation, rentals, accounts, petty cash Etc. are paid promptly.
4. Maintains such statistical data as required, including client data base, service record, etc.
5. Maintains Centre files, both client and admin.
6. Deals with routine correspondence.
7. Types letters, reports etc. as required
8. Answers phones, makes appointments and acts as receptionist as required.

NURSE/ THERAPY ASSISTANT - DUTY STATEMENT

Responsible to: Program Director

Duties

1. Monitors the physical health of children attending the Centre program
2. Administers prescribed medication to any child attending the Centre Program and maintains records.
3. Administers first aid to children or staff as required.
4. Advises staff on health matters.
5. Liaises with parents on any health issues affecting their child.
6. Delivers ABA/DTT sessions as required.

ATAC

Action for Tasmanian Autistic Children

DUTY STATEMENT CASE MANAGER/LEAD THERAPIST**RESPONSIBILITIES**

The Case Manager is responsible to ensure that all aspects of the program are running smoothly and the child is gaining benefit from the program. The case manager is the key contact between the family and the Centre. The Case Manager needs to be competent in delivery of a broad range of intervention strategies within the Discrete Trial Training framework.

Responsible to: Program Director.

DUTIES:

Formulates assessment information and consultant's observations and advice into a written program structure, with definitions and detailed specifications as to delivery within the Discrete Trial Training framework. Prepares Individual Program Plans.

Responsible for the training and supervision of therapists working with the child to ensure that the program is delivered appropriately.

In order to know the child well, works with the child (at least once a week).

Responsible for accuracy of records, and maintains such records as are required.

Runs team meetings as needed in order to ensure quality and consistency of therapy, and to discuss and resolve difficulties.

Discusses the child's program with the Program Director on a regular basis, and organizes review sessions. Also liaises with and consults the Program Director on other client issues and more general issues relating to the Centre's services.

Runs small-group training sessions for parents as required.

Maintains good communication and rapport with the child's family.

Represents the Centre and assists in developing and maintaining good will.

Undertakes other duties as required by the Program Director.

SENIOR THERAPIST DUTY STATEMENT.

Responsible to: Case Manager of individual child's program.

Duties:

1. Conducts one-to-one therapy sessions according to instructions specified in the child's program plan.
2. Assists the Case Managers in the execution of their duties.
3. Maintains records of therapy and other data as required
3. Undertakes other tasks as are necessary for the well-being of the child while s/he is in his/her care.

THERAPIST DUTY STATEMENT.

Responsible to: Case Manager of individual child's program.

Duties:

1. Conducts one-to-one therapy sessions according to instructions specified in the child's program plan.
2. Maintains records of therapy and other data as required
3. Undertakes other tasks as are necessary for the well-being of the child while s/he is in his/her care.

JOB DESCRIPTION

Therapists implement therapy/training programs for children with autism. These programs are written by Case Managers, overseen by the Program Director, based on recommendations made for the individual child following psychological assessment of the child's current functioning. Programs are designed on the principles of Learning Theory and Applied Behaviour Analysis (ABA).

Programs are designed to both rectify deficits in the individual child's functioning and to build on his or her strengths. The deficits and strengths will vary from child to child, thus every program is different. Target areas cover the whole spectrum of human functioning, and include language, social skills play skills, problem solving, representational thought, Etc.

The therapist works without direct supervision, but according to specified techniques (primarily a technique known as Discrete Trial Training [DTT]), and to a written schedule of the training (ie the individual program). The Therapist is also required to maintain a written record of everything done, and the results achieved, in each therapy session. The Therapist's work is reviewed regularly by the Case Manager who is also available to the Therapist at any time for advice and guidance.

Thus the Therapist works directly in the one-to-one situation with children who will generally be aged between two and six years of age. They deliver therapy according to precise specifications of how to teach as well as what to teach.

CASE MANAGER TRAINING**Day 1****AM – 9.30 -****SESSION 1 - .**

Introduction – welcome.

Objectives for the fortnight.

The role of the Case manager – scope and limitations.

Programming, planning, and knowing when to get assistance.

Relating to your therapists – relating to your program manager.

The skills a case manager needs (child development, behavioural management, people skills, perseverance, enthusiasm) – how to get them and where to look for help.

Setting individual objectives for the fortnight.

PM – 2.30**SESSION 2 - Coping with emotion – yours and theirs.**

Looking after yourself: Assertion, coping the difficult people and stress management.

Maintaining a professional relationship. Knowing when to back off.

Understanding parents – grief – denial and how to respond.

Knowing when to call for help.

Day 2**AM. 9.30****SESSION 3. Cognitive –conceptual development**

How a child learns – important milestones and stages.

How Autism affects this – specific skills and cognitive deficits.

Key drills to teach (object permanence, representation, concepts/equilibration, problem solving, theory of mind – prerequisites for each).

PM – 2.00**SESSION 4 Visuo spatial skills**

What are these and why we teach them.

Visual concepts, logic and flexibility. Advanced visuo spatial skills.

Visual Maths – functional maths – money skills..

Day 3**AM -9.30****SESSION 5 Motor development**

Motor deficits – Dyspraxia, Cerebral Palsy, Hemiplegia, Ataxia,

Fine motor skills – eye hand coordination, pincer grip, finger discrimination, wrist rotation.

Principles of development. Pencil grip and fluency.

Gross motor skills. Body image – motor planning, strength, balance, flexibility, rhythm.

Toe walking, upper body strength,

When to call in the OT the Physio therapist.

PM 1-4**SESSION 6 –Behaviours.**

Self stimulatory behaviours, obsessions and phobias.

Why they appear, what maintains them, how to manage (interrupt, reduce opportunity, desensitise)

When to get the psychologist.

Tantrum management. Why and how.

Identifying the triggers – working out strategies which work for individual children.

Does and don'ts and rules which must be followed.

4.30 – 6.00**SESSION 7 Using schedules.**

Different schedules for different tasks (attention to task, independent work, independent play, .sequencing a task, time tables etc).

Day 4**AM - 9.30****SESSION 8 Language development – using PECS support..**

Who need it and why? The non verbal / beginner, the child with “aphasia”, dyspraxia / dysarthria, poor sequencing and organisation. .

Establishing communicative intent – Picture exchange.

Cognitive prerequisites – teaching a Compic vocabulary.

Receptive – expressive - sentence construction (including adjective, preposition, past/future tense etc).

Extending memory – supporting listening skills.

Using apron – using book – and beyond if needed.

Teaching W questions – answers.

Social statements – parallel talk - conversation.

When and how to fade.

Extending if oral language is lagging.

PM – 2.00

SESSION 9 Language development - oral work.

Achieving good articulation – oral motor work, Say drills,

Achieving automated retrieval fluency drills and I see drills.

Listening skills – refining – extending length.

Using memorised scripts (tell me about drills, why – because drills etc) working towards stimulus generalisation – response generalisation.

Parallel and circle drills, ask a question drills – initiation..

Social statements – conversation starters.

Conversation drill, topic maintenance.

Conversation encouragers and social comments.

Narrative sequences – starting with “What did you do?” drill.

Descriptive sequences – starting with “Tell me about this picture” drill.

Day 5**AM. – 9.30****SESSION 10 Working in kindy and pre-primary.**

Protocol for entering educational settings and other institutions..

Working in the kindergartens and pre-primaries.

Doing observations an gathering information, writing this up.

Common problems and suggestions,

Making best use of the classroom aide – training.

Encouraging socialisation – engineered situations.

Introducing Compic.

PM.- 1.30**SESSION 11 Working with the school aged child (advanced).****Helping with school work:**

Phonic reading, comprehension, functional and fun reading.

Spelling and composing sentences. The one task at a time principle.

Reinforcing maths concepts,

Peer tutoring.

Group participation.

Helping with coping strategies:

Coping with behaviours - using social stories, problem solving for strategies,

Teaching emotions, own, others and judging the appropriate levels.

Teaching appropriate social behaviours.

Teaching values.

Coping with teasing and anger management issues.

Teaching relaxation strategies.

Teaching self monitoring and organisation.

Day 6

AM – 9.30

SESSION 12 –Management issues:

Policy and procedures. Organisational structure.

Paper work responsibilities

Lines of communication.

Organising therapists – who is responsible for what.

Role of coordinator or resources manager.

PM. – 2.00

SESSION 13 –Health and Safety issues: Looking after own health - back care, avoiding infection.

Planning further training needs. Evaluation.

Days 7 & 8

INDIVIDUAL TRAINING PLANS,

OBSERVATIONS,

WORKING IN TANDEM**Day 9****AM. – 9.30****SESSION 14 Programming:**

Working from an assessment report.

Prioritising, keeping program to appropriate length,

Maintenance list – when and what to put on it.

Organisation of program log book.

When to generalise – when to move off table – out of room.

Keeping track of reward schedules.

PM – 2.00 GROUP DISCUSSION

Group discussion topics – problem solving difficult situations.

Language receptive-expressive

Eating disorders

Sleep disorders

Toilet training for poo

Extra problems.

Day 10**Review and Individual Evaluation.**